## **CLAIMS**

## 1. A compound of formula (I)

$$\begin{array}{c|c}
R^{3} & (CH_{2})_{n} & CH_{3} \\
N & O & H
\end{array}$$
(I)

wherein

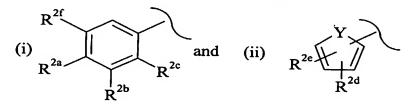
-X- is 
$$-C(R^4R^5)$$
-, -O- or -S-;

n is 2 or 3;

R<sup>1</sup> is H or C<sub>1</sub>-C<sub>4</sub> alkyl;

 $R^3$  is H, halo,  $C_1$ - $C_4$  alkyl,  $O(C_1$ - $C_4$  alkyl), nitrile, phenyl or substituted phenyl;

R<sup>4</sup> and R<sup>5</sup> are each independently selected from H or C<sub>1</sub>-C<sub>4</sub> alkyl; Ar- is selected from the group consisting of



15

20

5

10

in which

R<sup>2a</sup> is H, halo, methyl or ethyl;

R<sup>2b</sup> is H, halo or methyl;

R<sup>2c</sup> is H, halo, methyl, trifluoromethyl, nitrile or methoxy;

R<sup>2d</sup> is H, halo, methyl or ethyl;

R<sup>2e</sup> is H, halo, methyl, trifluoromethyl, nitrile or methoxy;

R<sup>2f</sup> is H, or fluoro;

-Y- is -O-, -S- or 
$$-N(R^6)$$
-; and

R<sup>6</sup> is H or methyl:

5

20

25

or a pharmaceutically acceptable salt thereof.

2. A compound as claimed in claim 1, represented by the formula (Ia)

$$\begin{array}{c|c}
R^3 & X & R^1 \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & &$$

(Ia)

wherein -X-, n,  $R^1$ ,  $R^3$  and Ar have the values as defined for formula (I) in claim 1.

- 3. A compound as claimed in either claim 1 or 2, wherein -X- is  $-C(R^4R^5)$ -.
  - 4. A compound as claimed in claim 3, wherein R<sup>4</sup> and R<sup>5</sup> are both H.
- 5. A compound as claimed in claim 3, wherein  $R^4$  and  $R^5$  are both the same  $C_1$ - $C_4$  alkyl.
  - 6. A compound as claimed in any one of claims 1 to 5, wherein Ar is (i).
  - 7. A compound as claimed in claim 6, wherein R<sup>2c</sup> is H.
  - 8. A compound as claimed in either claim 6 or 7, wherein  $R^{2a}$  is H or methyl,  $R^{2b}$  is H and  $R^{2f}$  is H.
  - 9. A compound as claimed in either claim 6 or 7, wherein  $R^{2a}$  is H,  $R^{2b}$  is halo and  $R^{2f}$  is H or fluoro.

5

10

15

20

25

- 10. A compound as claimed in any one of claims 1 to 5, wherein Ar is (ii) and -Y- is -S-.
- 11. A compound as claimed in any one of claims 1 to 4, represented by the formula II

$$R^3$$
 $(CH_2)_n$ 
 $CH_3$ 
 $R^{2b}$ 
 $R^{2b}$ 
 $R^{2b}$ 

wherein n,  $R^1$ ,  $R^{2a}$  and  $R^{2b}$  have the values as defined for formula (I) in claim 1 and  $R^3$  is H, halo, phenyl or substituted phenyl.

- 12. A compound as claimed in any one of claims 1 to 11, wherein n is 3.
- 13. A compound as claimed in any one of claims 1 to 12, wherein R<sup>1</sup> is H, methyl, ethyl or n-propyl.
- 14. A compound as claimed in any one of claims 1 to 13, wherein R<sup>3</sup> is H or halo.
- 15. A pharmaceutical composition comprising a compound as claimed in any one of claims 1 to 14 or a pharmaceutically acceptable salt thereof, together with a pharmaceutically acceptable diluent or carrier.
- 16. A compound as claimed in any one of claims 1 to 14 or a pharmaceutically acceptable salt thereof, for use in therapy.

30

- 17. Use of a compound as claimed in any one of claims 1 to 14 or a pharmaceutically acceptable salt thereof, for the manufacture of a medicament for treating a disorder of the nervous system.
- 5 18. Use as claimed in claim 17 wherein the disorder of the nervous system is selected from the group consisting of an addictive disorder and withdrawal syndrome, an adjustment disorder, an age-associated learning and mental disorder, anorexia nervosa, apathy, an attention-deficit disorder (ADD) due to general medical conditions, attention-deficit hyperactivity disorder (ADHD), bipolar disorder, bulimia nervosa, 10 chronic fatigue syndrome, chronic or acute stress, conduct disorder, cyclothymic disorder, depression, dysthymic disorder, fibromyalgia and other somatoform disorders, generalized anxiety disorder, incontinence, an inhalation disorder, an intoxication disorder, mania, migraine headaches, obesity, obsessive compulsive disorders and related spectrum 15 disorders, oppositional defiant disorder, panic disorder, peripheral neuropathy, post-traumatic stress disorder, premenstrual dysphoric disorder, a psychotic disorder, seasonal affective disorder, a sleep disorder, social phobia, a specific developmental disorder, selective 20 serotonin reuptake inhibition (SSRI) "poop out" syndrome, TIC disorders, cognitive disorders including mild cognitive impairment (MCI), dementia of the Alzheimers type (DAT), vascular dementia and cognitive impairment associated with schizophrenia (CIAS), hypotensive states including orthostatic hypotension, and pain including chronic pain, 25 neuropathic pain and antinociceptive pain.
  - 19. A method for selectively inhibiting the reuptake of norepinephrine in mammals, comprising administering to a patient in need thereof an effective amount of a compound as claimed in any one of claims 1 to 14, or a pharmaceutically acceptable salt thereof.

20. A method for treating disorders associated with norepinephrine dysfunction in mammals, comprising administering to a patient in need thereof an effective amount of a compound as claimed in any one of claims 1 to 14, or a pharmaceutically acceptable salt thereof.